

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jacob Scott on 06/15/09.

The application has been amended as follows:

In the claims:

1. A computer-implemented method for processing data, the method comprising:
Executing, by a computer, a pipeline of object-based commands (~~pipeline~~);
receiving, by the computer, a parseable object emitted from a prior object-based command within the pipeline comprising a plurality of object-based commands, the prior object-based command being one of a plurality of object-based commands, ~~such that a subsequent object-based command within the pipeline which receives~~ receiving the parseable object ~~is configured to communicate~~ communicating with the prior object-based command within the pipeline through the parseable object emitted from the prior object-based command, the parseable object includes at least one method, and ~~wherein~~

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an operating environment that supports the pipeline of the plurality of object-based commands ~~is configured to support~~ execution of the object-based commands within the same process;

obtaining, by the computer, a data type for the parseable object and extending the parseable object by obtaining properties and methods associated with the data type using object reflection, the object reflection is implemented without a priori knowledge of parameters, the object reflection obtains a new data type associated with the parseable object (PPO) from an external source including one or more of, a third party object, a semantic web, and an ontology service;

obtaining, by the computer, format information describing a format for the data type; and

emitting, by the computer, a format object for access by another subsequent command, the format object being based on the format information, wherein the format object is emitted to a computer readable storage medium.

12. A computer readable storage medium including at least one tangible component and having computer-executable instructions ~~that, when executed, direct a computing system to perform a method for providing pre-output processing and data based upon input from a prior command's output data, the method comprising:~~

executing a pipeline of object-based commands ~~(pipeline)~~;

receiving by reference a parseable pipeline object (PPO), from a computer readable storage medium, the PPO having been emitted from a prior command with an

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administrative tool framework that supports a pipeline, and the administrative tool framework is ~~configured to support~~ supporting the execution of the object-based commands within the same computer process, the prior object-based command being one of the plurality of commands, the receiving occurs as part of the pipeline of object-based commands entered together as a parseable stream and separated into separate commands, ~~such that a subsequent object-based command within the pipeline which receives~~ receiving the parseable object is ~~configured to communicate~~ communicating with the prior object-based command within the pipeline through the parseable object emitted from the prior object-based command, the parseable object having at least one method;

obtaining a data type for the PPO using object reflection;

obtaining format information describing a format for the data type of the PPO, the format information describes at least one of a plurality of formats, the plurality of formats comprising:

a shape;

a property; and

a header, ~~wherein~~ the format information is obtainable by accessing one of a plurality of data sources, the data source is one selected from the group consisting of: an XML document, an Active Directory Object, and a delimiter separated values file;

emitting to a computer readable storage medium an output format object (OFO) for access by another subsequent object-based command from the plurality of object-

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based commands, the OFO is based upon the obtained format information, and parameters of the command; and

terminating the pipeline is an output command that accepts as input the PPO and the OFO and delivers the result of the pipeline of the object-based commands, wherein:

results are delivered to an output method that has been provided by the administrative tool framework to support the methods of output supported by the computer; and

the format of result depends upon whether the output command is preceded by any number of format modifying commands such that:

in an event that a format modifying command includes a markup command, the format modifying command will add property annotation to selected parameters within the PPO for input by further subsequent commands in the pipeline;

in an event that format modifying command includes a convert command, the format modifying command will be configured to convert the PPO into a specific file format; and

in the event that a format modifying command includes a transform command, the format modifying command will be configured to receive instruction from a format modifying command including a convert command and transform the PPO from the specific file format into another specific format based upon a style sheet.

20. A system that supports data driven output, the system comprising:

a processor;

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a memory, the memory being allocated for a plurality of computer-executable instructions which are loaded into the memory for execution by the processor, ~~upon execution of the computer executable instructions the system being configured to the~~ instructions comprising:

executing ~~execute~~ a pipeline of object-based commands (pipeline);

receiving ~~receive~~ a parseable object emitted from a prior object-based command within an operating environment that supports the pipeline and ~~that is configured to support~~ the execution of the object based commands within the same process, the prior object-based command being one of the plurality of object-based commands, receiving the parseable object occurs as part of the pipeline, entered together as a parseable stream and separated into separate object-based commands, ~~such that~~ the subsequent object-based command within the pipeline which receives the parseable object is ~~configured to communicate~~ communicating with the prior object-based command within the pipeline through the parseable object emitted from the prior object-based command, the parseable object having at least one method;

obtaining ~~obtain~~ a data type for the parseable object using object reflection, the object reflection is implemented without a priori knowledge of parameters, the object reflection obtains a new data type associated with the parseable object from an external source including one or more of, a third party object, a semantic web, and an ontology service;

obtaining ~~obtain~~ format information describing a format for the data type; and

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emitting ~~emit~~ a format object for access by a subsequent object-based command from the plurality of object-based commands, the format object being based on the format information and parameters of object-based commands, the format object is emitted to a computer readable storage medium; and

terminating ~~terminate~~ the pipeline and deliver a result of the pipeline of object-based commands, the result is delivered according to an output method supported by the computer, the format of the result depends upon whether the output command is preceded by any number of format modifying commands.

26. Cancelled.

27. Cancelled.

28. Cancelled.

29. Cancelled.

30. Cancelled.

31. Cancelled.

32. Cancelled.

33. Cancelled.

34. Cancelled.

35. Cancelled.

36. Cancelled.

37. Cancelled.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RACHNA S. DESAI whose telephone number is (571)272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rachna S Desai/
Primary Examiner, Art Unit 2176
06/16/09